

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-38 (canceled)

39. (previously presented) A buoyancy apparatus for providing tension for an offshore riser comprising:
- a) at least one buoyancy element; and
 - b) a frame comprising a plurality of vertical members externally disposed to said at least one buoyancy element, said frame secured to said riser to allow buoyancy to be transferred to said riser, wherein at least one of said plurality of vertical members extends the vertical length of said at least one buoyancy element.
40. (currently amended) The buoyancy apparatus of claim 46 39, wherein said frame is directly secured to said riser.
41. (currently amended) The buoyancy apparatus of claim 46 39, wherein said frame is indirectly secured to said riser through a riser stem pipe.
42. (currently amended) The buoyancy apparatus of claim 46 39, wherein said frame is comprised of tubular members.
43. (currently amended) The buoyancy apparatus of claim 46 39, wherein said frame is neutrally or positively buoyant in said water.
44. (canceled) ~~The buoyancy apparatus of claim 1, wherein said frame is constructed to carry loads exerted by external forces selected from loads caused by movement of a host facility, wave action and current action.~~
45. (canceled) ~~The buoyancy apparatus of claim 18, wherein said frame is constructed to carry loads exerted by external forces selected from loads caused by movement of a host facility, wave action and current action.~~

46. (previously presented) The buoyancy apparatus of claim 39, wherein said frame is constructed to carry loads exerted by external forces.
47. (previously presented) The buoyancy apparatus of claim 46, wherein said frame is constructed to carry loads exerted by external forces selected from loads caused by movement of a host facility, wave action and current action.
48. (new) The buoyancy apparatus of claim 46, wherein said buoyancy element comprises a buoyancy can.
49. (new) The buoyancy apparatus of claim 46, wherein said buoyancy element comprises syntactic foam.
50. (new) The buoyancy apparatus of claim 46, wherein said frame further comprises a plurality of connectors.
51. (new) The buoyancy apparatus of claim 50, wherein said plurality of connectors comprises a first connector positioned above said at least one buoyancy element and a second connector positioned below said at least one buoyancy element.
52. (new) The buoyancy apparatus of claim 51, wherein said plurality of connectors further comprises one or more connectors positioned between said first connector and said second connector.
53. (new) The buoyancy apparatus of claim 52, wherein said one or more connectors comprise perforated plates.
54. (new) The buoyancy apparatus of claim 50, wherein said plurality of connectors comprise radial arms.
55. (new) The buoyancy apparatus of claim 50, wherein said plurality of connectors comprise a plate.
56. (new) The buoyancy apparatus of claim 50, wherein said plurality of connectors comprise at least one of radial arms and a plate.
57. (new) The buoyancy apparatus of claim 46, wherein said frame further comprises at least one bracing member external to said buoyancy element.

58. (new) The buoyancy apparatus of claim 57, wherein said at least one bracing member comprises at least one of a diagonal bracing member and a horizontal bracing member.
59. (new) The buoyancy apparatus of claim 57, wherein said at least one bracing member is radially arched.
60. (new) The buoyancy apparatus of claim 48, further comprising one or more gas service lines, wherein said lines are positioned adjacent to said frame and adjacent to said buoyancy can and enter said buoyancy can at the bottom of said buoyancy can.
61. (new) The buoyancy apparatus of claim 48, further comprising one or more gas service lines, wherein said lines are positioned within said frame and enter said buoyancy can at the bottom of said buoyancy can.
62. (new) A buoyancy apparatus for providing tension for an offshore riser comprising:
a) a plurality of buoyancy elements; and
b) a continuous external frame around said plurality of buoyancy elements, said external frame secured to said riser to allow buoyancy to be transferred to said riser;
thereby eliminating stiffness discontinuity along the buoyancy apparatus.
63. (new) A buoyancy apparatus according to claim 62, wherein said buoyancy elements are arranged in series along the length of said riser.
64. (new) A buoyancy apparatus according to claim 63, wherein said continuous external frame is comprised of a plurality of external frame sections, said plurality of external frame sections thereby forming said continuous external frame.
65. (new) A buoyancy apparatus according to claim 64, wherein said plurality of external frame sections includes a lower positioned external frame section and a higher positioned external frame section, said lower positioned external frame section connected to said higher positioned external frame section.
66. (new) A buoyancy apparatus according to claim 65, wherein said lower positioned external frame section includes a lower mating element, said higher positioned external frame section includes a higher mating element, said lower mating element is connected to said higher mating element, thereby forming a connection.

67. (new) The buoyancy apparatus of claim 65, wherein said continuous external frame comprises a plurality of vertical members.
68. (new) The buoyancy apparatus of claim 67, wherein said continuous external frame further comprises one or more connector(s).
69. (new) The buoyancy apparatus of claim 68, wherein said one or more connectors comprise perforated plates.
70. (new) The buoyancy apparatus of claim 68, wherein said one or more connectors comprise radial arms.
71. (new) The buoyancy apparatus of claim 68, wherein said one or more connectors comprise a plate.
72. (new) The buoyancy apparatus of claim 68, wherein said continuous external frame is directly secured to said riser through said one or more connectors.
73. (new) The buoyancy apparatus of claim 68, wherein said continuous external frame is indirectly secured to said riser through said one or more connectors, said connector(s) secured to a riser stem pipe.
74. (new) The buoyancy apparatus of claim 67, wherein said continuous external frame is comprised of tubular members.
75. (new) The buoyancy apparatus of claim 74, wherein said continuous external frame further comprises at least one bracing member external to said buoyancy elements.
76. (new) The buoyancy apparatus of claim 75, wherein said at least one bracing member comprises at least one of a diagonal bracing member and a horizontal bracing member.
77. (new) The buoyancy apparatus of claim 75, wherein said at least one bracing member is radially arched.
78. (new) The buoyancy apparatus of claim 74, wherein said continuous external frame is neutrally or positively buoyant in water.
79. (new) The buoyancy apparatus of claim 65, wherein said continuous external frame is constructed to carry loads exerted by external forces.

80. (new) The buoyancy apparatus of claim 79, wherein said continuous external frame is constructed to carry loads exerted by external forces selected from loads caused by movement of a host facility, wave action and current action.
81. (new) The buoyancy apparatus of claim 65, wherein said buoyancy elements comprise a buoyancy can.
82. (new) The buoyancy apparatus of claim 81, further comprising one or more gas service lines, wherein said lines are positioned adjacent to said continuous external frame and adjacent to said buoyancy can and enter said buoyancy can at the bottom of said buoyancy can.
83. (new) The buoyancy apparatus of claim 81, further comprising one or more gas service lines, wherein said lines are positioned within said continuous external frame and enter said buoyancy can at the bottom of said buoyancy can.
84. (new) The buoyancy apparatus of claim 65, wherein said buoyancy elements comprise syntactic foam.